

NJDOT Bureau of Research  
**QUARTERLY PROGRESS REPORT**

Project Title:	Tower Street Lighting	
RFP NUMBER: 7192678	NJDOT RESEARCH PROJECT MANAGER: Stefanie Potapa	
TASK ORDER NUMBER: 13	PRINCIPAL INVESTIGATOR: Josh DeFlorio	
Project Starting Date: 1/26/2010 Project Ending Date: 7/25/2010	Period Starting Date: 1/1/2010 Period Ending Date: 3/31/2010	

Task	% of Total Project Budget	Total Budget	% of Task This Quarter	Cost This Quarter	% of Task to Date	Total Cost to Date
1. Kick Off Meeting	9%	\$4,056	100%	\$4,056	100%	\$4,056
2. Literature Review	13%	\$5,858	92%	\$5,389	92%	\$5,389
3. Choose Alternative Application Sites	6%	\$2,704	51%	\$1,379	51%	\$1,379
4. Choose lighting Systems	7%	\$3,154	0%	\$0	0%	\$0
5. Analyze Base Case Lighting Systems	11%	\$4,957	0%	\$0	0%	\$0
6. Create Test Case Lighting Systems	14%	\$6,309	0%	\$0	0%	\$0
7. Conduct Performance Comparisons for all Cost and Safety Factors	22%	\$9,914	0%	\$0	0%	\$0
8. Final Report	18%	\$8,111	0%	\$0	0%	\$0
TOTAL	100%	\$45,062		\$10,824		\$10,824

**Project Objectives:**

The objectives of this project are to:

Provide technical staff with a framework for understanding the potential benefits and constraints associated with utilizing high mast lighting in place of conventional lighting systems in appropriate contexts.

**Project Abstract:**

This study will explore the potential benefits of replacing conventional highway lighting systems with high mast systems. Factors subject to comparative evaluation include 1) the ease and cost of maintenance, including expected man hours 2) the safety of maintenance personnel, 3) cost/benefit analysis, including capital costs, maintenance costs, energy costs,

and anticipated system life, 4) impacts on the safety of the motoring public, and 5) impacts on the environment and aesthetics.

### **1. Progress this quarter by task:**

Task 1:

- Held kick off meeting at NJDOT Regional HQ (included sub consultant);
- Compiled and distributed meeting summary, with deliverables for each participant

Task 2:

- Commenced literature review and state DOT interviews;  
Submitted draft technical memorandum, summarizing results (anticipated 3/31).

Task 3:

- Discussed site selections with NJDOT over phone and during kick-off;
- Initiated request for plans from NJDOT;
- Began digitizing plans for Visual.

Tasks 4-8:

- No activity this quarter.

### **2. Proposed activities for next quarter by task**

Task 1:

- Completed.

Task 2:

- Incorporate client comments into draft technical memorandum, as necessary.

Task 3:

- Obtain and digitize all site plans.

Task 4:

- Select a specific high mast system as a test case.

Task 5:

- Establish the costs and safety characteristics of the existing conventional system.

Task 6:

- Develop one high mast lighting conceptual design for each selected scenario to ensure that minimum functional requirements are achieved.

Task 7:

- Conduct comparative analyses of the high mast conceptual design and the actual conventional lighting system for each application site.

Task 8:

- Complete and submit final report, incorporate changes as necessary.

### **3. List of deliverables provided in this quarter by task (product date)**

- Kick off meeting (2/16/10);
- Draft Technical Memorandum: Literature Review and Interviews (3/31/10, anticipated).

### **4. Progress on Implementation and Training Activities:**

- No work on implementation or training in this period

## 5. Problems/Proposed Solutions:

- No problems identified for this period

Total Project Budget	\$45,062.46
<b>Contract Amount:</b>	\$45,062.46
Total Project Expenditure to date	\$11,077.62
% of Total Project Budget Expended	25%